

### **REMARKS/DISCUSSION OF ISSUES**

By this Amendment, Applicant amends claims 2 and 15 to correct two minor typographical errors. Accordingly, claims 2-18, 20-22 and 25 remain pending in the application.

Reexamination and reconsideration are respectfully requested in view of the following Remarks.

### **CLAIM OBJECTIONS**

By this Amendment, Applicant amends claims 2 and 15 to correct two minor typographical errors. Accordingly, Applicant respectfully requests that the objections to claims 2-18, 20-21 and 25 be withdrawn.

### **35 U.S.C. § 102(a)**

The Office Action rejects claim 22 under 35 U.S.C. § 102(a) over so-called Applicant's admitted prior art, citing page 4, lines 26-27 of the specification.

Applicant respectfully traverses these rejections for at least the following reasons.

First, page 4, lines 26-27 contains no admission of any prior art under 35 U.S.C. § 102(a).

M.P.E.P. § 2132(I) provides that:

*“Known or Used” Means Publicly Known or Used. The statutory language ‘known or used by others in this country’ (35 U.S.C. § 102(a)), means knowledge or use which is accessible to the public.*

The text at page 4, lines 26-27 mentions an **unpublished** German patent application – i.e., a German patent application which had not been published at the time of the effective filing date of the present patent application. Clearly, an **unpublished** patent application is not something that is “*patented or described in a printed publication*” under 35 U.S.C. § 102(a). Furthermore, an unpublished German

patent application is not “*knowledge or use which is accessible to the public.*”

Furthermore, the sole inventor of German patent application 10151778.5 is the same as the sole inventor of the present application. So the information disclosed in German patent application 10151778.5 is not “*by another*” – nor did Applicant disclose his invention prior to his own invention thereof.

So Applicant respectfully submits that the German patent application 10151778.5 is not prior art for this patent application under 35 U.S.C. § 102(a), and nothing on page 4, lines 26-27 of the present specification constitutes any admission of any prior art under 35 U.S.C. § 102(a).

Furthermore, page 4, lines 26-27 does not admit or disclose that the referenced German patent application 10151778.5 even discloses all of the details of the features in claim 22 – which indeed, it does not.

Additionally, Applicant respectfully objects to the mischaracterization of the text on page 4, lines 26-27 of Applicant’s specification.

Page 4, lines 26-27 states that:

*“the method according to the invention makes significant use of an arrangement as described in the unpublished German patent application, file number 101 51 778.5”*

In contrast, the Office Action states that:

*“Applicant admits that the system used to execute the presently claimed method, i.e., a system comprising means for executing all steps as set forth in claim 22, was known in the art prior to invention.”*

Therefore, for at least these reasons, Applicant respectfully requests that the Examiner withdraw the rejection of claim 22 under 35 U.S.C. § 102(a).

**35 U.S.C. § 103**

The Office Action rejects claims 2-9, 11-13, 16-18, 22 and 25 under 35 U.S.C. § 103 over Tournier et al. U.S. Patent Application Publication 2002/0168321 ("Tournier") in view of Kreuwel et al. U.S. Patent 6,764,859 ("Kreuwel"); claims 10, 14, 15 and 20 under 35 U.S.C. § 103 over Tournier in view of Kreuwel and further in view of Ivkov U.S. Patent Application Publication 2006/0142749 ("Ivkov"); and claim 21 under 35 U.S.C. § 103 over Tournier in view of Kreuwel and further in view of Rand U.S. Patent Application Publication 2005/0066961 ("Rand").

Applicant respectfully traverses these rejections for at least the following reasons.

**Claim 22**

At the outset, Applicant relies on at least on the following standards with regard to proper rejections under 35 U.S.C. § 103. First, a rejection on obviousness grounds under 35 U.S.C. § 103 cannot be sustained by mere conclusory statements: instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also KSR International Co. v. Teleflex Inc., 550 U.S. 398, 82 USPQ2d 1385, 1396 (2007) (quoting Federal Circuit statement with approval) See M.P.E.P. § 2141(III). Second, there must be a reasonable expectation of success. *"The mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art."* M.P.E.P. § 2143.01(III) (citing KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396 (2007)). Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *"All words in a claim must be considered in judging the patentability of that claim against the prior art."* M.P.E.P. § 2143.03 (citing In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). An integral part of this analysis requires establishing the level of ordinary skill in the art of invention of claim 1. See M.P.E.P. §§ 2141(II)(C) and 2141.03.

Applicant respectfully traverses the proposed modification of Tournier's device

in the rejection of claim 22 under 35 U.S.C. § 103 for at least the reason that the proposed combination of teachings lacks an articulated reasoning with some rational underpinning.

Among other things, the apparatus of claim 22 includes means for generating a first magnetic field with a spatial distribution such that the first magnetic field has a lower magnetic field strength in a first sub-area of the examination area and the first magnetic field has a higher magnetic field strength in a second sub-area with a higher magnetic field strength of the examination area, and wherein a gradient of the first magnetic field reverses direction and experiences a zero crossing within the first sub-area, and means for changing the spatial location of both the first and second sub-areas in the area of examination, including changing a location where the gradient of the first magnetic field reverses direction and experiences a zero crossing within the first sub-area, so that a magnetization of the magnetic particles changes locally, wherein the means for changing the spatial location of both the first and second sub-areas in the area of examination include means for imposing in at least part of the first sub-area a second, time-varying, magnetic field..

The Office Action fairly admits that Tournier does not teach varying the spatial location of the first and second sub-areas where the first (imaging) magnetic field has the higher and lower field strengths, or that a gradient of the first (imaging) magnetic field reverses direction and experiences a zero crossing within the first sub-area.

The Office Action insists that Kreuwel teaches these features and that it would have been obvious to have modified Tournier to include these features “*in order to prevent agglomeration of the magnetic particles.*”

Applicant respectfully disagrees.

Tournier exposes magnetic particles to a single magnetic field for imaging.

Kreuwel teaches an arrangement for mixing magnetic particles by subjecting them to a magnetic field with different and changing directions.

The Office Action appears to be arguing that the combination of Kreuwel's teaching with Tournier's would not only have produced an apparatus which added the time-varying field of claim 22 to Tournier's imaging magnetic field “*in order to prevent*

*agglomeration of the magnetic particles:*” but would have additionally modified Tournier’s imaging magnetic field – for reasons unknown – to vary the spatial location of the first and second sub-areas where the first (imaging) magnetic field has the higher and lower field strengths, and provide that a gradient of the first (imaging) magnetic field reverses direction and experiences a zero crossing within the first sub-area. Again, it is noted that claim 1 does not recite that the second (time-varying) magnetic field has the first and second sub-areas where the first (time-varying) magnetic field has the higher and lower field strengths, or that a gradient of the second (time-varying) magnetic field reverses direction and experiences a zero crossing within the first sub-area. These features in claim 22 pertain to the imaging magnetic field.

It is unknown on what basis the Office Action asserts that one of ordinary skill in the art upon reading Kreuwel’s disclosure would have come to the conclusion that she/he should not only modify Tournier’s system to add a second time-varying magnetic field to prevent agglomeration, but also should modify Tournier’s imaging magnetic field to vary the spatial location of the first and second sub-areas where the first (imaging) magnetic field has the higher and lower field strengths, and provide that a gradient of the first (imaging) magnetic field reverses direction and experiences a zero crossing within the first sub-area. Nor is it explained how it is known that one of ordinary skill in the art at the time of the invention would have had any reasonable expectation based on the cited art that such a modification would produce an apparatus which could produce good magnetic imaging results.

Applicant respectfully submits that such a modification of Tournier can only be based on an impermissible hindsight reconstruction from Applicant’s own teachings, and not from what anyone of ordinary skill in the art would have concluded based upon a combination of the teachings of Tournier and Kreuwel.

Therefore, for at least these reasons, Applicant respectfully submits that claim 22 is patentable over the cited prior art. Accordingly, Applicant respectfully requests that the rejection of claim 22 be withdrawn, and that claim 22 be allowed.

Claim 2

Among other things, the method of claim 2 includes generating a first magnetic field having a field strength with a spatial distribution such that the first magnetic field has a lower magnetic field strength in a first sub-area of the examination area and the first magnetic field has a higher magnetic field strength in a second sub-area of the examination area, and wherein a gradient of the first magnetic field reverses direction and experiences a zero crossing within the first sub-area, and changing the spatial location of both the first and second sub-areas in the examination area, including changing a location where the gradient of the first magnetic field reverses direction and experiences a zero crossing within the first sub-area, so that a magnetization of the magnetic particles changes locally, wherein before or during the determining of the spatial distribution of the magnetic particles in the examination area the magnetic particles are exposed to a second, time-varying, magnetic field so as at least to reduce agglomeration of the magnetic particles

For similar reasons to those set forth above with respect to claim 22, Applicant respectfully submits that Tournier and Kreuwel, taken individually or collectively, does not disclose or suggest any method having this combination of features.

Therefore, for at least these reasons, Applicant respectfully submits that claim 2 is patentable over the cited prior art. Accordingly, Applicant respectfully requests that the rejection of claim 2 be withdrawn, and that claim 2 be allowed.

Claims 3-9, 11-13, 16-18 and 25

Claims 3-9, 11-13, 16-18 and 25 all depend from claim 2 and are deemed patentable over the cited art for at least the reasons set forth above with respect to claim 2. Accordingly, Applicant respectfully requests that the rejections of claims 3-9, 11-13, 16-18 and 25 be withdrawn, and that claims 3-9, 11-13, 16-18 and 25 be allowed.

Claims 10, 14, 15, 20 and 21

Claims 10, 14, 15, 20 and 21 all depend from claim 2.

Applicant respectfully submits that Ivkov and Rand do not remedy the deficiencies of Tournier and Kreuwel as set forth above with respect 2.

Therefore, for at least these reasons, Applicant respectfully submits that claims 10, 14, 15, 20 and 21 are patentable over the cited art. Accordingly, Applicant respectfully requests that the rejections of claims 10, 14, 15, 20 and 21 be withdrawn, and that claims 10, 14, 15, 20 and 21 be allowed.

**CONCLUSION**

In view of the foregoing explanations, Applicant respectfully requests that the Examiner reconsider and reexamine the present application, allow claims 2-18, 20-22 and 25 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

Respectfully submitted,

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